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WHAT IS CLAIMED IS:

1. A <u>minute droplet</u> forming method of <u>electrostatic attraction type</u> for forming a minute droplet by attracting a liquid by applying a <u>pulse voltage</u> to a nozzle tip containing said liquid, said method comprising:

a step of applying said <u>pulse voltage</u> between a <u>substrate</u> arranged to face said <u>nozzle tip</u> with a predetermined space therebetween and said liquid within said nozzle so as to project said liquid from said nozzle tip and form a liquid column; and

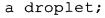
a step of isolating said droplet by enhancing a <u>fluid</u> resistance within said nozzle so as to cause a <u>setback force</u> for returning said liquid into said nozzle to act on said formed liquid column.

- 2. A minute droplet forming method according to claim1, wherein a size of said droplet to be formed is adjusted by controlling said setback force.
- 3. A minute droplet forming method according to claim 1, wherein each of said forming and isolating of said droplet is carried out under a saturation vapor pressure of said liquid.
- 4. A minute droplet forming method according to claim 1, wherein said nozzle is a core nozzle having a core arranged therewithin.
 - 5. A minute droplet forming apparatus comprising: a nozzle for storing therewithin a liquid for forming

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a <u>substrate</u>, arranged so as to face a tip of said nozzle, for mounting said droplet dropped from said nozzle tip;

a <u>pulse power supply</u> for applying a <u>pulse voltage</u> between said liquid within said nozzle and said substrate;

a <u>fluid regulating unit</u> adapted to change a <u>fluid</u> resistance within said nozzle; and

a control unit for controlling said pulse power supply and said fluid regulating unit.

- 6. A minute droplet forming apparatus according to claim 5, further comprising an environment maintaining unit for causing surroundings of said tip of said nozzle and said substrate to keep a saturation vapor pressure environment of said liquid within said nozzle.
- 7. A minute droplet forming apparatus according to claim 5, wherein said nozzle is a core nozzle having a core arranged within said nozzle.